Acute leukaemia is not as uncommon in equatorial East Africa as has until recently been believed. The acute myelogenous variety is disproportionately common in children and has an unusually frequent chloromatous presentation. Although the reasons for this are not entirely clear, the effect of environmental factors is considered. The possible inter-relationship of malaria, Burkitt's lymphoma and acute leukaemia remains an enigma. Poor therapeutic results demand greater attention to the problem.